DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-017832 Address: 333 Burma Road **Date Inspected:** 06-Nov-2010

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Zhu Zhong Hai. No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** OBG components.

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Mr. Shailesh Wadkar was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA Inspector observed and/or found the following:

OBG Trial Assembly Yard:

This QA Inspector observed the following work in progress:

OBG Seg 11BE and Seg 11CE:

This QA Inspector observed ABF personnel doing Ultrasonic Testing (UT) of weld joint no: OBE11-008 [Deck Panel (DP) to DP – transverse splice weld]. See attached photo for further details.

OBG Seg 11CW and Seg 11DW:

The Shielded Metal Arc Welding (SMAW) process on weld joint no: OBW11C-002 [Side Panel (SP) to SP; transverse splice, complete joint penetration (CJP) weld]. The welder is identified as 046709 and was observed welding in the 4G position. ZPMC QC was identified as Zhu Zhong Hai. The welding variables recorded by QC appeared to comply with Welding Procedure Specification (WPS): B-P-2214-B-U2-FCM-1.

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Base metal repair welding after removal of temporary attachments at weld joint no: OBW11C-002 (SP to SP transverse splice; CJP weld). Welding process was identified as SMAW. The welder is identified as 044515 and was observed welding in the 4G position. ZPMC QC was identified as Zhu Zhong Hai. The welding variables recorded by QC appeared to comply with WPS: 345-SMAW-4G(4F)-FCM-Repair. Repair welding was done as per Critical Welding Repair Report (CWR): B-CWR-1842 Rev-0.

OBG Seg 11DE and Seg 11EE:

The Flux Cored Arc Welding (FCAW) process on weld joint no: OBE11C-008 [Bottom Panel (BP) to BP; transverse splice CJP weld]. The welder is identified as 052763 and was observed welding in the 1G position. ZPMC QC was identified as Wang Li Yang. The welding variables recorded by QC appeared to comply with WPS: B-T-2231T.

The FCAW process on weld joint no: OBE11C-007 (SP to SP; transverse splice CJP weld). The welders are identified as 044473 and 040458 and were observed welding in the 3G position. ZPMC QC was identified as Wang Li Yang. The welding variables recorded by QC appeared to comply with WPS: B-T-2233T.

OBG Seg 11CE:

This QA Inspector observed ZPMC personnel doing fit-up of Suspender Bracket SB102E with OBG Seg 11CE. See attached photo for further details.

OBG Seg 11CE and Seg 11DE:

The FCAW process on weld joint no: OBE11A-002 (DP to DP; transverse splice CJP weld). The welder is identified as 040533 and was observed welding in the 1G position. ZPMC QC was identified as Wang Li Yang. The welding variables recorded by QC appeared to comply with WPS: B-T-2231T.

OBG Seg 11AE and Seg 11BE:

Repair welding of weld joint no: OBE11B-004 (SP to SP – transverse splice; CJP weld). Welding process was identified as SMAW. The welder is identified as 040320 and was observed welding in the 4G position. ZPMC QC was identified as Zhou Peng. The welding variables recorded by QC appeared to comply with WPS: 345-SMAW-4G(4F)-FCM-Repair. Repair welding was done as per CWR: B-CWR-2161 Rev-0.

OBG Seg 11BW:

ZPMC personnel doing heat straightening of Longitudinal Diaphragm (LD) at W4 side, panel point (PP) 100. Heat straightening was done as per heat straightening report (HSR): HSR1 (B)-9552 Rev-0. See attached photo for further details. ZPMC QC was identified as Zhu Zhong Hai.

ZPMC personnel doing gouging of weld joint no: SP782-017 (T-rib to SP – hold back fillet weld, at PP100). Gouging of the weld was done (as per WRR: B-WR16601 Rev-0) to correct the misalignment of the T-ribs after welding. ZPMC QC was identified as Zhu Zhong Hai. Prior to gouging, pre heating was observed to be done. See

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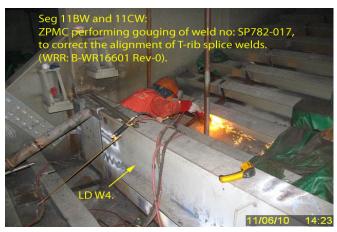
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attached photo for further details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.









Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang; phone: 15000422372., who represents the Office of Structural Materials for your project.

Inspected By:	Wadkar,Sailesh	Quality Assurance Inspector
Reviewed By:	Dsouza, Christopher	QA Reviewer